

## Status of the Upper Berryessa Creek Project Review

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The following is a summary of the basic points which need to be resolved Santa Clara Valley Water District (District) and Corps regarding the proposed Upper Berryessa Creek flood control project. I will be flushing these points out in a memo of greater detail for the Army Corps and water district to formalize the information we should have and the points we need to resolve. The field observations presented in this memorandum are based on a site inspection including the project site, and areas upstream and downstream of the site in Berryessa Creek, Milpitas and San Jose, Santa Clara County, on September 3, 2015.

### 1. Environmental Values

This “Upper Berryessa Creek” project area is not an intermittent or ephemeral creek. It is a perennial creek flowing now in September. The stream channel is occupied by egrets at each of four of the five stations we selected to represent the whole project reach. Two stations were also used by wood ducks. The wetland vegetation includes cattails, horsetails, dock, and other wetland species. The channel is remarkably stable with only a few random slumps.

The upper part of the watershed (upstream of the project site) is grazed and has ranchettes and homes. The sediment loading is going to be long term and significant with gravels and larger materials creating a depositional channel upstream of the project in the Greenbelt area the Majestic Way reaches. This large amount of material will transport downstream. The reaches immediately upstream of the project area contain beautiful very large old sycamores, and oak woodlands with elderberry trees, cottonwoods, and willows. The natural channel is about 10 feet wide. It is wonderful riparian bird habitat supporting downy woodpeckers, hawks, etc. This is the upstream proposed project phase where there has been public opposition and I can see why.

The downstream boundary of the proposed project is the “ Lower Berryessa” Flood Control Project we have permitted. Its existing condition is a well-watered channel; there are canopy oaks along the terrace slopes and our permit for this phase with SCVWD requires a bankfull channel with willows planted on the west side of the channel. This channel has adjusted to about 12-15 feet width.

**Conclusion (1):** The Upper Berryessa Creek channel is not a ditch, and is not without existing environmental resources or potential resources which can logically connect to better upstream and downstream environments. The issue of whether there is enough ground water to support willows or other riparian vegetation is not a relevant issue, given that the channel is flowing with surface water now in the driest part of the year. All sections of the channel have self- formed an “active” or bankfull channel of 10-15 feet. It is clear that the SCVD is applying herbicide in the channel (a spray warning sign and smell of the pesticides confirm this) which is the reason that riparian vegetation is not more apparent (Conclusion 2 follows

the next section.)

## 2. Sediment and Modeling Issues

We remain baffled by the sediment modeling described in the reports we have received which indicate modeling assumptions of a 6% slope and a 0.04 roughness and average channel width of 8 feet. The proposed project is located on slopes of under one percent and the proposed project design channel widths are 20-40 feet. The existing channel has clearly filled in an old project trapezoidal cross-section. We have requested that the old project dimensions be made available to us and the Corps. We have also requested maintenance records for this area which we have not received. Without this information no one can determine the sedimentation rates. The projects channel area has filled to recreate a more natural channel dimension we see up and downstream, of about a 12-15 foot width.

We did not receive the final EIS report until after our August 11, 2015 meeting with the Corps and District. This contained the latest project modeling description we did not have for that meeting. Apparently they were able to show modeling results of moderate sedimentation impacts when they widen the channel cross-section by indicating a reduced sediment load contributed from upstream. They do this by stating that they will have the proposed upstream project in place with a bypass channel added. The bypass channel will then trap a lot of sediment. This is equaling baffling because the Corps reports that this upstream project does not meet their cost- benefit analysis and this area was removed from the project boundaries. In addition, this is the area for which there is presumably public opposition to projects.

I believe it is Corps' policy that they cannot use the benefits nor conditions of a not yet constructed up or downstream project, and assign these benefits or changes as assumptions for a proposed new project design. In addition, I am not sure this bypass project would be permissible by the resources agencies.

Finally they assume that sedimentation will be reduced in the project area by reducing bank erosion in this area. The bank erosion is not a significant source of channel sedimentation.

I need to look at their actual model and would like to ask for permission to use about two hours of Setenay's time to look at it and then speak with their modeler, to clarify these issues.

**Conclusion (2):** This project is actually just a large channel maintenance project in which the district is digging out an old project which is not performing because of the sediment loading. The pretense of an actual project is based on digging the channel out larger than it was originally. It's clear that whatever they dig out will return to existing conditions.